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Trust to the Mother Among Adolescents From Single-Parent Families and the Structure of Its Predictors

Yulia Mochalova[1*]

[1]Faculty of Psychology, Pedagogy and Defectology, Don State Technical University, Rostov-on-Don, Russian Federation
email: guliya@mail.ru

Abstract: The scientific and psychological validity of the a priori attitude of practicing psychologists and parents in solving the urgent problem of adolescent distrust has been verified that the trusting attitude of adolescents towards parents exists only in the form of opposition; trust or distrust based on a previously developed model for studying ambivalent trust. The aim of the research was to study the features of the classified ratios of trust/distrust to a mother in adolescents from single-parent families and the role of order in the structure of predictors of trust in a mother in these ratios. The study involved adolescent boys and girls, in the number of 177 people aged 15 years, raised in families where the only parent living with a teenager is the mother. The following methods were used: content analysis based on expert assessments; subjective scaling according to specified parameters; statistical technology for developing the construct classification of the trust/distrust ratio; approximation by hyperbolic rank parametric distribution; nonparametric statistics. It was found that 1) only 19% of the respondents have "absolute trust" and "absolute distrust", and the rest have different variants of ambivalent trust ($p<0.01$). 2) significant predictors of adolescents trust in the mother are: a) "trust in me"; b) honesty; c) reliability; d) fairness; e) commitment to fulfilling promises; f) an unappreciative attitude. 3) the average value of the β coefficient is higher in the "positive" variant of ambivalent trust, when adolescents from single-parent families have both trust and distrust of their mother, but trust significantly prevails over distrust.

Keywords: *trust, ambivalence, predictors of trust in the mother, adolescents.*

Introduction

One of the most pressing problems for the modern family in all its psychological and socio-psychological contexts is the problem of children's trust in their parents. If we consider the age aspect, then in adolescence, due to the increasing independence of children from their parents, this problem often becomes the most urgent, both from the perspective of parents and from the perspective of an adolescent (Danilova, 2018; Akbayeva et al., 2020; Clarke et al, 2020; Belousova A. et al., 2023, etc.).

Special attention should be paid to adolescents from single-parent families. The divorce of parents or the death of one of them can have a strong impact on the emotional sphere of children (Nikolaeva L.P. et al., 2019; Jung, 2024).

Analysis of the work of practicing psychologists dealing with this problem (Michalec et.al., 2024; Benjamin, 2024; Skripkina, 2000), showed that the phenomena of trust and distrust are considered only as a mutually exclusive opposition of two states of trust - distrust, and not as a single phenomenon in which there are not only complex relationships, mutual transitions, etc., between trust and distrust, but it is also experienced by the subject of trust in different ways and, at the same time, not always positively.

Parents, if they are trying to solve the problem of distrust on the part of a teenager, strategically "solve" it always only in this context - either he\she does not trust me, or he\she trusts me, without including any intermediate factors, although the role of the latter may be very significant.

Practicing psychologists and parents often identify the phenomena of trust and trustworthiness, which, of course, are interconnected, but far from being identical (Dorofeev V.A., Mochalova Yu.A. (2018)).

In studying the above–mentioned problem, it is necessary to proceed from the theoretical position

*Corresponding author: guliya@mail.ru

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that trust and distrust can exist in the form of mutually exclusive opposition - either trust or distrust of an adolescent. In the works on the study of adolescents' trust in parents, this option is the theoretical basis of the research presented in them.

The "either... or.." option reflects the relationship of the sum between trust and distrust and the linearity of the space of their interaction, in which instantaneous inversions from trust to distrust are simply excluded, although as obvious experience shows, from adolescents' trust to distrust in parents there is sometimes only "one step". It can be assumed that there are states that we associate with the ambivalence of trust, which are the hidden basis of inversions.

In their work based on the logic of statistical generalizations on the trust-distrust ratio, Zybleva, 2017 identified nine zones of ambivalence of trust, classified at the level of a qualitative scale, potentially affecting the above-mentioned inversions in different ways. Two variants have a positive background in relation to the "psychological well-being" of the subject of trust (zone D and zone B in the diagram) and seven variants have a negative background - zones I – VII in the diagram. In addition, we have identified two more zones defined by two modes of trust (the first "trust" is denoted by the letter "D" - trust is the maximum possible, but there is no distrust, and the second - "distrust" is denoted by "N" - there is no trust, but distrust is the maximum possible).

In accordance with the above, the problem of adolescents' trust in parents can be studied from the position of parents in relation to an adolescent , as well as from the position of adolescents in relation to parents. These positions do not coincide in the vast majority of cases of this problem. Of course, when solving a problem, the best option is to integrate parents and adolescents, but the reality is that it is impossible to solve this problem and the only thing that needs to be recognized is that it is more important to "be" in the position of an adolescent when solving it.

In studying the above–mentioned problem, it is necessary to proceed from the fact that there are a huge number of predictors (different authors use different terms to denote them - causes, imperatives, conditions, factors, qualities, etc.) and they have a very different ontological status, and that when studying trust in parents, their empirical validity is very important.

An analysis of works in this area has shown that over the past 10 years there have been no works in which predictors of trust in parents would be the subjects of a separate study, although there are works in which such a task is set, but, for example, O.A. Zybleva identifies the phenomena of trust and trustfulness in the text (Danilova, 2018), which, although being related have different psychological nature.

In the works of Danilova Yu.Yu., predictors of trust in parents are a phenomenological background for the study of self-confidence (Krasnova, 2012). As for publicly available Internet sources, their contents have a literary status rather than have a well-developed empirical basis.

Trust in parents appears as a result of the action of several predictors. In a situation of multi-predictor trust in parents, two conditions - a single psychological organization of an adolescent and the presence of a functional relationship between predictors - can lead to the fact that they collectively form a structure characterized by a certain order in which the whole is not a product of the properties of its individual parts (predictors). Here it is worth paying special attention to what we will understand by the order in the structure of predictors of trust.

The fact is that when "adapting" the basic provisions of the theory of systems in different scientific disciplines, problems and confusion arise with the key definitions of this theory. This also applies to such basic concepts as "structure", "order", "structurality". In relation to psychology, very few researchers pay attention to the relative ontological autonomy of the content that they designate.

After analyzing the literature, we found that only O.V. Krasnova presents her criteria for using the concepts of "structure" and "structurality" in systemic research in psychology (Dorofeev, 2019).

When studying the order in the structure of the determinants of trust in the leader, V.A. Dorofeev (Arapov, Efimova, Schrader, 1975) believes that the basis may be the study of the balance between the functional significance of these determinants, the quantitative expression of which are the parameters of the hyperbolic H-distribution ranked by the parameter. The conclusion about the order in the structure of the system can be made based on the interpretation of the rank coefficient β, which characterizes the degree of steepness of the hyperbola: the higher the value of β, the more stable the structure is (Kudrin, 1993; Mochalova, 2016, etc.). With an increase in β, the values of which are limited by the upper limit, order and stability in the structure become higher, but at the same time adaptive capabilities decrease under conditions of change (Subbotin, 2011).

To study the order in the structure of predictors of adolescent trust in parents, it is very important to conduct a qualitative classification of these predictors. This is determined by the fact that classification is the basis for constructing the structure of any phenomenon (Vyatkin, 2009, etc.) and in the theory of discrete systems (a classified set is a variant of the discreteness of elements), one of the options for ordering the structure is to reduce the number of elements, since "..... the more parts the system is divided into, the more chaotic and less orderly its structure becomes " (Kim, Uichol, Park, Young-Shin, 2023, et al.).

Considering the above, we put forward the following hypotheses.

Hypothesis 1: Absolute adolescents' trust or distrust to the mother from single-parent families is no more common than various variants of ambivalent trust in her

Hypothesis 2: The peculiarities of the relationship between adolescents trust and distrust to the mother from single-parent families are manifested in the peculiarities of the order of the structure of predictors of trust in the mother.

Materials and Methods

The study involved girls and a boy from single-parent families, where the only parent living with the child is only the mother. Taking into account the fact that the ethnocultural characteristics of a teenager's family may manifest themselves in trust in the mother, we conducted measurements in grades 9 of the Rostov-on-Don MAEI (municipal autonomous educational institutions), taking into account the relative homogeneity of the subjects according to ethnic and religious criteria (Gurina, 2009). Since the acceptable average approximation error was assumed to be 15%, 177 adolescents from single-parent families aged 15 years participated in the main study with subsequent analysis of these results.

Different groups of methods were used: a) content analysis using expert assessments; b) sujective scaling according to specified quantitative parameters; c) technology for developing a statistical construct of qualitative classification of the ratio of trust and distrust; d) mathematical and statistical approximation of empirical data to find the parameters of a hyperbolic rank parametric distribution.

a) Content analysis using expert assessments was used to identify predictors of maternal trust in adolescents from single-parent families. The subjects were asked to write a short, non-standardized essay on the topic "What do you think your mother would have, that would be the basis for your trust in her." Instructions: "I will trust my mother if she.... (continue). Write down all the answers that come to your mind, because there are no right or wrong answers in this task. You can answer in monosyllables (one, two, three words) or in detail." Two psychology teachers at the university, one practical psychologist and one school psychologist acted as experts. During the expert assessment, the measure of consistency of their opinions was checked. Due to the fact that it was impossible to apply any numerical estimates to solve this problem, we found it reasonable to consider valid those options that all four experts have.

b) Subjective scaling according to the specified quantitative parameters was used in two organizational variants, taking into account the tasks that were solved on them. The first option was used to study the measure of adolescents' trust and distrust to the mother from single-parent families. Two unipolar scales (trust and distrust) were used. The choice of this method was due to the fact that it gave a relatively "direct" assessment of the studied variables, without "imposing" evaluation criteria on respondents. The number of gradations on the scale is from 0 (minimum) to 10 (maximum). The left pole of the scale (0 points) was characterized by a complete lack of trust/distrust, the right pole of the scale (10 points) was characterized by absolute trust/distrust. To increase the validity of empirical results, measurements on the scale of "trust" and "distrust" were carried out anonymously (the subjects were assigned numbers) and measurements of of trust and distrust were carried out at intervals of several days (4 days). The second option was used to study the quantitative relationship between predictors of adolescents trust to the mother from single-parent families. The research technique proposed by V.A. Dorofeev (Gurina, 2009) was used only in relation to our research situation. Due to the fact that a priori the interaction of predictors was considered additive (sum), the subjects were asked to distribute only 24 points (6×4=24) among 6 predictors, identified by experts during content analysis, in accordance with the opinion of the subjects about the significance of predictors of their trust in the mother in the aggregate of all six.

c) The development of a statistical construct for the qualitative classification of the ratio of trust and distrust was carried out using the following technology. 1) Creating a single scale by combining the results of trust and distrust into one sample, followed by joint normalization (standardization) in order to statisti-

cally substantiate trust and distrust (determine whether trust/distrust belongs to one or different samples) distributed according to Gauss's law. 2) Construction of a coordinate system with orthogonal axes based on trust and distrust and the origin of coordinates at the intersection of averages (value 0) and construction of confidence intervals. 3) Determination by individual jointly normalized values of trust and distrust in their ratio of the zone in which the subject is located.

d) Mathematical and statistical approximation of empirical data to find the parameters of the hyperbolic rank parametric distribution of the quantitative ratio between predictors of maternal trust in adolescents from single-parent families was carried out by the method proposed by R.V. Gurina (Dorofeev and Mochalova (2018)), which is based on the method of "straightened" hyperbolic dependence on a double logarithmic scale (ln) followed by linear approximation functions (the "Linear Regression" function in Microsoft Excel). Since the requirements for the validity of the final results of our study was required, due to the use of a regression model in finding the parameters of hyperbolic H-distributions of the significance of predictors of adolescents trust in the mother, to check the quality of the calculated models with the exception of the results of those subjects whose quality does not meet the necessary requirements, thus to solve this problem we used the average error approximation (s), which reflects the measure of discrepancy between empirical values and values calculated using the regression equation. Since there is no way to statistically estimate the tolerance of the average approximation error, and different statistical sources on regression analysis offer different options for the acceptable average approximation error (from 8% to 15%), we settled on the 15% option. Accordingly, those subjects with s>15% were excluded from further analysis.

Methods of statistical and mathematical analysis. The nonparametric binomial criterion m was used to statistically assess the significance of differences in the frequency of occurrence of an effect with its absence. A nonparametric χ^2 criterion was used to compare the empirical frequency distribution with the uniform theoretical one. The nonparametric N-Kruskal-Wallace criterion was used to determine the significance of differences in the β coefficient as a parameter of the hyperbolic H-distribution ranked by the parameter in adolescents from single-parent families in 11 zones of the ratio of trust and distrust to the mother

Results

1) Frequency distributions of classification zones of the ratio of adolescents trust and distrust to the mother.

In accordance with the classification scheme presented in the work of Kupreichenko, 2008, and the theoretical provisions presented in the theoretical part of the article and concerning additions to the zones of trust and distrust classified at the level of the qualitative scale, the entire sample was differentiated into 11 zones and, for the convenience of comparative analysis, specific significance in % of occurrence frequencies were calculated the subjects in each zone, which we present in Fig. 1 for clarity.

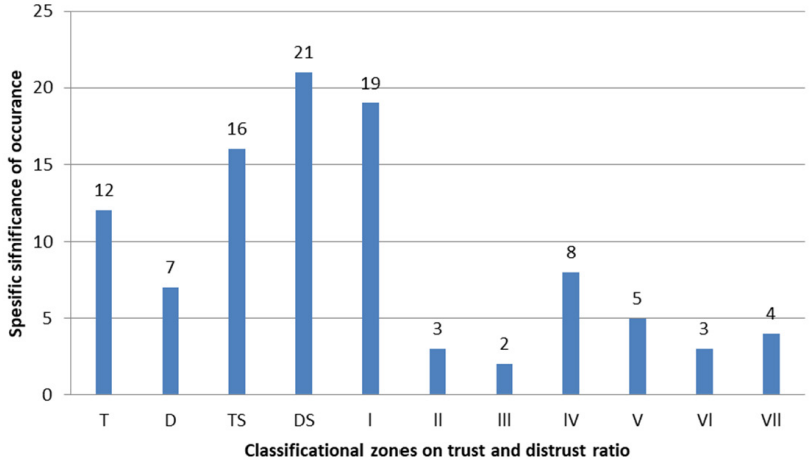

Figure 1. Diagram of the specific weights (in%) of the frequency of occurrence of adolescents in 11 zones of the ratio of trust and distrust of the mother

Note: "D" - absolute trust; "H" - absolute distrust; "DS" - trust statistically prevails; "TS"- distrust statistically prevails; I - trust/distrust within the confidence interval of average values; II - trust/distrust above the confidence interval; III - trust/distrust below the confidence interval IV- trust is higher, and distrust is within the confidence interval; V - trust is lower, and distrust is within the confidence interval; VI - distrust is lower, and trust is within the confidence interval; VII - distrust is higher, and trust is within the confidence interval

Two variants of the manifestation of trust in the mother, from which, as a rule, both practicing psychologists and parents "repel" in solving the problem of distrust of adolescents (the first "absolute trust" ("T") and the second "absolute distrust" ("D")), occur only in 32 (19%) of the 177 subjects, and the remaining 81% are teenagers who have ambivalent trust in their mother. Checking the statistical reliability of differences in the frequency of occurrence of adolescents with the variant "absolute trust" ("T") or "absolute distrust" ("D") with the frequency of occurrence of adolescents with ambivalent trust (included in one of the 9 zones) showed that these differences occur at $p<0.01$.

There is a relatively high percentage of occurrence in the sample of adolescents (37% in total) who have a "positive" variant of ambivalent trust (zone "T" and zone "D").

The most "negative" variant of ambivalent trust in the mother (zone "II"), when there is high trust and high distrust in adolescents in the ratio of trust and distrust, is relatively rare – only 5 out of 177 subjects, which is only 3%.

The most common "negative" variant of ambivalent trust in the mother is zone "IV", when there is absolute equality in the ratio of trust and distrust among adolescents and occurs in 14 out of 177 subjects, which was 8%.

To compare the empirical frequency distribution of the occurrence of subjects in different zones of the ratio of trust and distrust in the mother with a uniform theoretical one, a nonparametric $\chi 2$ criterion was used, which showed that there were no significant differences - $p \geq 0.05$.

2) The content of predictors of adolescents trust in the mother.

The results of a content analysis of the writings of teenagers on the topic "What does your mother have, as it seems to you, would be the basis for your trust in her" using expert assessments and taking into account the requirements for consistency of their opinions allowed us to identify 9 predictors of trust in the mother.

The first predictor was determined by the presence of trust on the part of the mother to the child (trust, which T.P. Skripkina called "Trust in me" (Skripkina, 2000)) and which in the writings was expressed in a generalized form as "I will trust my mother if she trusts me." The three predictors that experts identified were related to the mother's personality are 1) honesty; 2) reliability; 3) fairness. The five predictors identified by experts were determined by the behavioral losses of the mother – these are 1) commitment to fulfilling promises; 2) responsiveness to requests; 3) the fairness of accusations; 4) sincerity in communication; 5) unappreciative attitude. According to the frequency of occurrence in essays, the predictor "Mother's trust in me" is separately important, which occurs in one form or another in 63% of all adolescent writings. Further, there is no such obvious gap in the importance of any predictor of trust in the mother among adolescents (it occurs in one form or another from 17% to 24%).

One of the reasons, as it seems to us, is due to the fact that many predictors in a generalized form strongly correlate with each other. For example, the predictor that is associated with the mother's personality, reliability, correlates with the predictor that is associated with the behavioral losses of the mother - the obligation to fulfill promises. In this context, we asked experts to "consolidate" the classification model of predictors of maternal trust in adolescents. As a result, they reduced the model to 6 predictors. This is 1) "Mother's trust in me"; 2) honesty; 3) reliability; 4) fairness; 5) commitment to ful-filling promises; 6) an unappreciative attitude. These predictors were later used to test the second hypothesis of our study, although, if we comment, the predictor model reflects a certain average trend, which requires additional diagnostics in individual work with adolescents.

3) The order in the structure of predictors of adolescents trust in the mother.

For the convenience of analysis, the calculated average values and the standard deviation of the β coefficient for the rank distribution of predictors of adolescents trust in the mother in the 11 zones of the ratio of trust and distrust to her, we have summarized in Table 1.

Table 1.*The average values (Xsr.) and the standard deviation (σ) of the β coefficient for the rank distribution of predictors of trust in the mother in adolescents in the 11 zones of the ratio of trust and distrust to her*

Parameters	Classification zones according to the ratio of trust and distrust										
	T	**D**	**TS**	**DS**	**I**	**II**	**III**	**IV**	**V**	**VI**	**VII**
$X_{cp.}$	0,998	0,412	0,544	1,033	0,654	0,221	0,241	0,255	0,298	0,311	0,299
σ	0,265	0,385	0,355	0,213	0,411	0,135	0,145	0,185	0,142	0,199	0,201

The average value of the β coefficient is higher (with a relatively low standard deviation), oddly enough, not with absolute trust of the mother (zone "T"), but with a "positive" variant of ambivalent trust, when trust in the mother in adolescents statistically significantly prevails over distrust of her (zone "D") – 1,033.

Determining the significance of differences in the indicators of the β coefficient as a parameter of the hyperbolic H-distribution ranked by the parameter in adolescents in 11 zones of the ratio of trust and distrust towards the mother using the nonparametric N-Kruskal-Wallace criterion showed that the differences presented in Table 1 have the character of a statistical pattern at $p \leq 0.05$.

Discussions

Confirmation of Hypothesis 1 and a relatively high percentage of occurrence in a sample of adolescents from single-parent families who have a "positive" variant of ambivalent trust (zone "T" and zone "D"), we interpret as the fact that such adolescents more often "do not want to absolutely trust or absolutely not to trust I the mother, since the situation failures will have to "repay something" to them, but with distrust a person loses only a part, and with trust he\she loses everything (Arapov, Efimova, Schrader, 1975).

If we consider the amount of the ratio between trust and distrust, the variability of the ratio is very high and the psychological context of working with adolescents in the variant of the ratio "7 and 3" may require a slightly different approach from the variant of the ratio "9 and 1".

As for the fact that the most "negative" variant of ambivalent trust in the mother (zone "II"), when in the ratio of trust/ distrust there is simultaneous high trust and high distrust in adolescents, which may be a consequence of schizoid personality traits of a teenager (in psychiatry, it is recognized that ambivalence is quite natural for people with schizophrenia (Bleyer, 1993), although rare, but they do occur, it should be noted, that psychological work with such adolescents in terms of increasing their trust in their mother should be specially organized in cooperation with medical specialists.

The fact that the most common "negative" variant of ambivalent trust in the mother is zone "IV", when there is absolute equality in the ratio of trust/distrust in adolescents, perhaps indicates that absolute equality in the ratio of trust and distrust of the mother in such adolescents does not have a true trust attitude towards mothers, on the contrary it is a mechanism of protection against inadequate, from the point of view of the teenager, attempts by the mother to penetrate into his\her inner world.

A higher average value of the β coefficient is not with absolute trust of the mother (zone "T"), but with a "positive" variant of ambivalent trust, when adolescents trust in the mother statistically significantly prevails over distrust of her (zone "D"), and an increase in the β coefficient is identified with an increase in the stability of the system structure (Kudrin, 2013; Kudrin, 2013, etc.). This is manifested in a decrease in spontaneity in the formation of new predictors of trust in matter and the disappearance of old ones, and a change in the balance between predictors, which means an increase in order in the structure. We can interpret this as the fact that with absolute adolescents trust in the mother (zone "T"), we are really dealing

not with trust in the mother, but with trust in her with the element of “shifting responsibility for solving our own problems onto her shoulders.” In this regard, the absolute trust in the mother of adolescents cannot be called a “positive phenomenon from all sides”.

Since it has been established at the level of statistical regularity that adolescents are more likely to have various types of ambivalent trust in their mother compared to options of either absolute trust or absolute distrust, it can be assumed that the conviction of practicing psychologists and parents that the trusting attitude of adolescents towards their mother exists only in the form of opposition or trust or distrust is not quite It is true and can lead to serious negative consequences when solving the problem of distrust of the mother. Thus, the high percentage of those who have a “positive” version of ambivalent trust indicates that quite a lot of teenagers “do not want” to absolutely trust or absolutely distrust their mother, since in a situation of failure they have to “repay something” and, at the same time, with distrust, a person loses only a part Though with trust, he\she loses everything.

Consequently, the observed behavioral patterns of “trust” in the mother may not reflect true trust in the mother, but act as a “means” of solving their conscious and unconscious tasks through a mechanism of protection from inadequate, from the point of view of , an adolescent attempts by the mother to penetrate into his\her inner world, or as a desire through trust to escape from their own responsibility.

The classification model of predictors of trust in the mother in adolescents, which includes 6 such predictors (1) “trust in me”; 2) honesty; 3) reliability; 4) fairness; 5) fairness of accusations; 6) unappreciative attitude), can be used in psychological work with adolescents, but it should always be taken into account, that the predictor model was obtained empirically and reflects a certain average trend, which will require additional diagnostics in individual work with adolescents.

The relationship of the order in the structure of predictors of trust in the mother with the classified zones of the ratio of trust/distrust in adolescents from single-parent families and the established role of the latter in trusting the mother indicates that practicing psychologists and parents should remember the need to “maintain” a balance in the importance of predictors of trust in the mother.

Conclusions

It has been established that the conviction of practicing psychologists and parents that the trusting attitude of adolescents towards their mother exists only in the form of opposition or trust or distrust is not entirely true and can lead to serious negative consequences when solving the problem of distrust of the mother. The features of the classified ratios of trust/distrust in the mother and the ordering of the structure of predictors of trust in the mother suggest that the observed behavioral patterns of “trust” in the mother may not reflect true trust in the mother, but act as a “means” of solving

Conflict of interests

The authors declare no conflict of interest.

Author Contributions

Conceptualization, M.Yu.; methodology, M.Yu; software, M.Yu; formal analysis, M.Yu; writing—original draft preparation, M.Yu; writing—review and editing, M.Yu.

References

Akbayeva, A.M.-A., & Koichueva F.Kh. (2020). The role of parent-child relationships on the level of independence in adolescence. *World of Science. Pedagogy and psychology, 2*(8). URL: https://mir-nauki.com/PDF/13PSMN220.pdf

Arapov, M.V., Efimova, E.N., Schrader Yu.A. (1975). “On the meaning of rank divisions”. NTI, No. 1(2): 9-20. URL: http://www.kudrinbi.ru/public/442/

Belousova, A., Kosikova, L., Sinchenko, T., Vyshkvyrkina, M., & Belousova, E. (2023). Value and life-meaning orientations of adolescents with different levels of information awareness. In *E3S Web of Conferences* (Vol. 389, p. 08023). EDP Sciences. https://doi.org/10.1051/e3sconf/202338908023

Benjamin, G. (2024). Introduction: Trust Issues. https://doi.org/10.1332/policypress/9781529230871.003.0001

Bleiler, E. (1993). Handbook of Psychiatry. Moscow: Publishing House of the Independent Psychiatric Association.. URL: https://psychoanalysis.by/2019/03/25/книга-блейер-руководство-по-психиатр/

Clarke, A., Meredith, P. J., & Rose, T. A. (2020). Exploring mentalization, trust, communication quality, and alienation in adolescents. *Plos one, 15*(6), e0234662. https://doi.org/10.1371/journal.pone.0234662

Danilova, Yu.Yu. (2018). Trust in older adolescence in connection with individual personal characteristics and the social situation of development. (*PhD thesis*), St. Petersburg. URL: https://rusneb.ru/catalog/000199_000009_009693324/

Dorofeev, V.A. (2019). A systematic view of the problem of trust in the leader in the organization. Azimuth of scientific research: *Pedagogy and psychology. 8 №1*(26), 113-116. https://doi.org/10.26140/anip-2019-0801-0027

Dorofeev, V.A., & Mochalova Yu.A. (2016). Features of the order of the structure of the value system among Russian, French and Italian youth. *Modern studies of social problems (electronic scientific journal. 5*, 115-135 https://doi.org/10.12731/2218-7405-2016-5-115-135

Dorofeev, V.A., & Mochalova Yu.A. (2018). Positive and negative ambivalence of trust in the teacher among students with different styles of pedagogical leadership. *Psychological and pedagogical research. 2*(10), 114–124. https://doi.org/10.17759/psyedu.2018100210

Gurina, R. V. (2009). Preparation of students of physics and mathematics classes for future professional activity in the field of physics:monogr. – Ulyanovsk: VAO "MDC". URL: https://www.elibrary.ru/item.asp?edn=qwyuit

Jung, B. (2023). Effect of the Korean Adolescents' Personal Trust on Social Trust and Public Trust. *Journal of Public Value,* 41-48. https://doi.org/10.53581/jopv.2023.6.1.41

Kim, U., & Park, Y. S. (2004). The basis of trust in relationships: Indigenous psychological analysis of adolescents and their parents. K*orean Journal of Culture and Social Issue, 10*(2), 103-137. URL: https://www.researchgate.net/publication/369949545

Krasnova, O.V. (2012). Structure and structurality in the study of development processes in psychology and pedagogy. *The Almanac of Modern Science and Education. 12-1*(67), 77-79. URL: www.gramota.net/materials/1/2012/12-1/23.html

Kudrin, B. I. (2013). The mathematics of cenoses: species, rank-type, rank-by-parameter hyperbolic H-distributions and the laws of Lotka, Zipf, Pareto, Mandelbrot. The Center for Systems Research. *Cenological research. 19*, 357–412. URL: http://www.kudrinbi.ru/public/10524/index.htm

Kupreichenko, A.B. (2008). Psychology of trust and distrust. M.: Publishing house "Institute of Psychology of the Russian Academy of Sciences". URL: https://www.litres.ru/book/a-b-kupreychenko/psihologiya-doveriya-i-nedoveriya-9334547/chitat-onlayn/

Lewicki, R. J., McAllister, D. J., & Bies, R. J. (1998). Trust and distrust: New relationships and realities. *Academy of management Review, 23*(3), 438-458. https://doi.org/10.2307/259288

Michalec, G., Hargitai, D. M., & Bencsik, A. (2024). Organizational trust as a success factor. *Journal of Business Sectors, 2*(1), 61-67. https://doi.org/10.62222/XQQE2812

Mochalova, Yu.A. (2023). The structure of basic emotions as a factor of emotional intelligence in high school students. *Bulletin of the Samara State Technical University. Series: Psychological and pedagogical sciences. 1*(20), 143-159. https://doi.org/10.17673/vsgtu-pps.2023.1.11

Nikolaeva, L.P., Ognev A.S., Likhacheva E.V., Zhukova L.I., & Nikiforova V.V. (2019). Peculiarities of behavior of children from full and incomplete families in the prepubescent period. Psychology. *Historical and critical reviews and modern research. 8(6-1), 83-93.* https://doi.org/10.34670/AR.2020.46.6.261

Skripkina, T.P. (2000). Psychology of trust. M.; Study guide for students. higher education. institutions. — M.: Publishing center "Academy. URL: https://spblib.ru/ru/catalog/-/books/10049299-psikhologiya-doveriya

Subbotin, A.L. (2001). Classification. [electronic resource]. Electronic publishing: Center for Humanitarian Technologies. – URL: https://gtmarket.ru/library/basis/3794/3799

Vyatkin, V. B. (2009). Chaos and order of discrete systems in the light of the synergetic theory of information. Polythematic Online Scientific Journal of KubSAU, (47). URL: http://ej.kubagro.ru/2009/03/pdf/08.pdf

Zelinskaya, T.N. (2013). Explication of the content of the concept of ambivalence in psychology. *New in psychological and pedagogical research. 2*(30), 211-222. URL: https://www.elibrary.ru/item.asp?id=20681765

Zybleva, O.A. (2017). Trust in child-parent relationships in adolescence. *Bulletin of the State University. 4*, 29-37.URL: http://vestnik-ggu.ru/doc/4zibleva.pdf